Examination of a Group Counseling Model of Career Decision Making With College Students

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Abstract:

The authors examined the effectiveness of a group career counseling model (Pyle, 2007) on college students' career decision-making abilities. They used a Solomon 4-group design and found that students who participated in the career counseling groups had significantly greater increases in career decision-making abilities than those who did not participate in the groups. Implications for counseling and future research are discussed.

Keywords: group career counselling | college students | group design

Article:

College students face a variety of developmental transitions, challenges, and milestones in their late adolescent and early adulthood years; many of these challenges relate to exploring, defining, and establishing career goals and plans. The literature provides support for the notion that students are tasked with solidifying specific occupational goals and objectives during their college years (e.g., Johnson, Nichols, Buboltz, & Riedesel, 2002; Super, 1990). However, this task is not always mastered without effort or complexity. Many types of difficulties related to career decisions have been identified and categorized, including lack of readiness, indecisiveness, dysfunctional myths, lack of knowledge about process, lack of information about self, lack of information about occupations, lack of information about ways of obtaining information, inconsistent information due to internal conflicts, and inconsistent information due to external conflicts (Gati, Krausz, & Osipow, 1996). In addition, Healy (1982) and Swain (1984) described the possible future impact of unresolved career planning on areas such as salary, job satisfaction, self-esteem, and family relationships.

Therefore, as the need for counseling related to career self-efficacy and decisiveness becomes more salient on college campuses, counselors must respond with an effective and impactful modality. Because of the vast number of students facing difficulty related to career decision making, coupled with cost factors and availability of counselors, individual career counseling may no longer be the most efficient or helpful means to meet this need. Thus, alternative methods, such as career courses, groups, and computer-assisted career guidance (CACG), have been developed with the hope of maximizing the effectiveness of career decision making and planning interventions.

Career and life planning courses have been designed and implemented for undergraduates since the 1930s to assist students in gaining knowledge, skills, and personal decision making related to career (Collins, 1998; Halasz & Kempton, 2000; Smith, Myers, & Hensley, 2002). Research findings have supported the notion that these courses are effective methods of promoting college students' growth in several career-related areas. For example, Scott and Ciani (2008) determined that a semester-long undergraduate career class was effective at increasing self-efficacy beliefs. Additionally, Thomas and McDaniel (2004) reported that a career course for psychology majors significantly increased students' knowledge, confidence, and identity related to career decisions in their chosen field of study. Furthermore, in a quasi-experimental research study using a 10-week career and life planning course, undergraduate students showed increased vocational identity and career decision-making self-efficacy and decreased career indecision (Johnson et al., 2002). It is clear that career and life planning courses are effective in developing college students' career-related skills and development.

Moreover, even as some traditional-age college students struggle with career-related development, they face other well-defined psychosocial tasks, such as refining their identity, exploring new ways of communicating ideas, developing mature relationships and interpersonal bonds, managing emotions, and developing competence (Chickering & Reiser, 1993; Schultheiss, 2000). In fact, there is anecdotal evidence to suggest that group career counseling interventions do support the development of these psychosocial tasks (e.g., Berríos-Allison, 2011; Pope,1999). Consequently, a career and life planning course without a more reflective counseling component may limit students from fully exploring their career and life planning processes. Accordingly, a group career counseling component may be ideal to simultaneously convey career-related information and facilitate personal development for college students. In fact, several studies have suggested the effectiveness and efficiency of a group career counseling process (e.g., Clark, Severy, & Sawyer, 2004; Peng, 2000; Sullivan & Mahalik, 2000).

Clark et al. (2004) proposed a narrative approach to group career counseling. Although the purpose of their article was to provide readers with a narrative approach to group career counseling and not empirically examine the process, descriptive statistics and anecdotal comments from participants suggested that the group was beneficial toward career development. To provide empirical evidence of the effectiveness of group career counseling, Sullivan and Mahalik (2000) studied the development of women's career decision-making self-efficacy in a 6-week career counseling group. The authors created the group based on Betz's (1992) recommendations for counseling using career self-efficacy theory. Results of the study indicated that, compared with women in a control group, women in the career counseling group made

significant gains in their career decision-making self-efficacy and maintained that gain at a 6-week follow-up.

Aside from these few studies, however, there is inadequate literature on group career counseling. In fact, the majority of the published research conducted on group career counseling occurred in the 1960s and 1970s. There have been, however, several popular group career counseling models practiced over the past 25 years (e.g., job search group, career awareness group, life roles group). One compelling model (Pyle, 2007) that has been used to aid in the development of career decision-making skills has been practiced for over 30 years. This model, however, has not been empirically examined.

Pyle's Group Career Counseling Model

Pyle (2007) viewed group career counseling as a more complex experience than either group counseling or career counseling because of the group members' added processing of external as well as internal information. He grounded his model in a multitheoretical framework and defined four specific stages in the process of his group career counseling model. Additionally, he proposed both cognitive and affective goals for each stage and outlined the counseling skills needed for each stage. Furthermore, he provided helpful guidelines about how the model may be modified to fit different populations and settings. Finally, Pyle provided a detailed script for each group career counseling session and in-between session tasks for the members.

The first stage of the model (encounter) includes the affective goals of feeling comfortable with the group's process and having confidence in the leadership of the group. Cognitive goals for the encounter stage include clarifying expectations, understanding group logistics, and understanding the importance of confidentiality. In this first stage, Pyle (2007) stated that the counseling skills of attending, being concrete, and being genuine help establish the tone or group climate. The affective goals for the second stage (exploration) are marked by a higher comfort level with the group process and less anxiety about self-disclosure. Cognitive goals for the exploration stage revolve around group members obtaining a better understanding of themselves and the world of work. For example, counselors want members to understand how personality, value, interest, and ability variables affect career decision making and how cultural barriers can affect job attainment and career decision making. In addition to the counseling skills identified as important for the first stage, counselors also need to (a) display empathy by reflecting content and feelings, (b) ask probing questions to get members to think about themselves more deeply, (c) model appropriate self-disclosure, (d) use circling (i.e., asking all members to respond to a question), and (e) use linking to build cohesion.

In the third stage (working), the affective goals are for group members to become more open to change, exhibit a willingness to take risks, and feel an increasing acceptance of help from others. During the working stage, group members strive toward the cognitive goals of understanding in-depth information about potential jobs within a few personally viable career options, learning career decision-making processes and how to utilize those skills in the present and future, and learning about career information sources. Additional counseling skills used in this stage include (a) displaying advanced empathy, (b) challenging members' discrepancies and societal

stereotypes, (c) facilitating feedback exchange to increase self-awareness, (d) processing members' experiences, and (e) processing new information gained by the members.

The final stage (action) is characterized by developing a plan of action for career decision making beyond the group's life cycle. Affective goals consist of a sense of accomplishment and empowerment, a feeling of closeness among the members, and high energy regarding the possibilities for their futures. Pyle (2007) offered no specific cognitive goals for the action stage but stated that members should have a lot of information about themselves, careers, and career decision-making skills. Pyle offered three additional counseling skills for use in this stage. They include drawing conclusions, setting goals, and bringing closure to the group.

Although Pyle (2007) outlined complete scripts of activities for each group session and homework for between-session tasks, it is beyond the scope of this article to describe the details of those scripts. In general, the session activities and homework are specifically aimed at developing an understanding or knowledge of (a) the relationships among abilities, interests, and values of the world of work; (b) the process of career decision making and using this process for maximum advantage; (c) at least five potential careers that can be considered; and (d) helpful steps that can be implemented after the group ends. For a complete account of the scripts of in-session activities and between-session homework, see Pyle (2007).

Purpose of the Study

Although research examining the effectiveness of entire career and life planning courses is available, few researchers have examined the effectiveness of specific components of those courses. Whiston (2003) stated that empirical evidence regarding career counseling interventions and models is lacking and called for a surge of research examining the process and outcomes of career counseling interventions and models. In this study, we sought to examine the effect of Pyle's (2007) group career counseling model on the development of career decision making in traditional-age undergraduate students. The results of this study serve to preliminarily quantify the benefits of a specific group career counseling modality (i.e., Pyle's model) within a career planning course on the development of the career decision-making skills of undergraduate students. Specifically, this study was guided by the following research questions: (a) Does the group career counseling model, proposed by Pyle (2007), increase traditional-age college students' career decision-making abilities as measured by the Career Decision-Making Difficulties Questionnaire (CDDQ; Gati et al., 1996)? and (b) Is there a significant mean difference in career decision-making abilities for traditional-age college students who participate in the group career counseling intervention versus those who do not participate in the career groups?

Method

Design

We followed the Solomon four-group experimental design to analyze the data. This design was chosen because it can adequately measure the effects of the career groups and is immune to most threats to internal validity (Braver & Braver, 1988). Furthermore, the Solomon four-group design

is the only experimental or quasi-experimental design that assesses pretest sensitization. Pretest sensitization simply means that the act of taking the pretest causes participants to be more sensitive to the intervention, making generalizing results from a pretest sample to an unpretested sample difficult (Huck & Sandler, 1973).

Random assignment was used to place participants in either an intervention group or a control group for students participating in a group counseling project for undergraduate credit in a career development course. In the present design, two of the groups received the intervention (group career counseling) and two did not (control group). See Table 1 for group assignments. The participants initially assigned to control groups were given the opportunity to participate in the career counseling groups after data collection was completed. A 2 × 2 (Group Career Counseling × Measurement Group [CDDQ]) design was used. In other words, two of the groups (i.e., one intervention group and one control group) completed a pretest (CDDQ) and the other two groups did not. All groups completed a posttest (CDDQ).

Table 1. Random Assignment of Groups in the Solomon Four-Group Design

Group	Pretest	Intervention	Posttest
1	O	X	O
2	O		O
3		X	O
4			O

Note. $N = 40$. O = outcome measure; X = intervention.

Intervention

Pyle's (2007) group career counseling model was used with the participants in our study. The two treatment groups were organized with 10 undergraduate students and one facilitator for each group. Both group leaders were female counselor education doctoral students (one European American and one Turkish) who attended the same training session offered by the second author. The training included an explanation of Pyle's model and instruction on how to utilize the activities posited by Pyle. Both group leaders followed the same scripts for each of the group sessions. The training and scripts made for a particularly robust study because each of the career groups followed the same process.

As previously mentioned, the goal of Pyle's (2007) model is to enhance the career development of group members and to help them develop career decision-making skills. The group counseling model originally was constructed to include three 90-minute sessions. Pyle stated that the number of sessions could be adapted to accommodate specific needs; therefore, we adapted the format to four 60-minute sessions to make the time constraints more manageable for the sample. The group sessions were designed to follow a four-stage model of group development within a career counseling context. In the encounter stage, participants and the counselors get to know each other better and identify the content of the group program. In the exploration stage, participants broaden their thinking about the career possibilities that exist for them. In the working stage, participants process and synthesize the information they gathered from out-of-group homework assignments. Lastly, in the action stage, participants take actual steps and

engage in activities such as gathering further information and integrating the information for their career decision making.

Participants

Participants were undergraduate students from a midsized public university in the southeastern United States enrolled in an undergraduate career and life planning course. One requirement for the course was to select one of two career exploration processes (i.e., individual exploration or the group career counseling). Of the 67 students who chose the group career counseling over the individual career exploration, 40 participated in the research, giving us a 60% response rate. Of the 40 participants, 32 were women (85%) and six were men (15%); two participants did not respond. Two participants (5%) identified as Asian or Asian American, 19 (47.5%) identified as Black or African American (not Hispanic), 16 (40%) identified as Caucasian or European American (not Hispanic), and three (7.5%) identified as mixed or biracial. Ten (25%) students were freshmen, 13 (32.5%) were sophomores, four (10%) were juniors, and 13 (32.5%) were seniors. Of the participants, 27 (67.5%) had made an occupational choice prior to the group and 13 (32.5%) had not. Participants' ages ranged from 18 to 50 years, with a mean of 20.98 and median of 20.00. Finally, years of undergraduate education ranged from 1 to 10 years, with a mean of 2.72 and a median of 2.00.

Procedure

Prior to data collection, this study was approved by the university's institutional review board. Before the first group session, informed consent documents were given to all students electing to be members in the career counseling groups. Those who chose to participate in the research study were then randomly assigned to either one of the career groups or either one of the control groups. One career group and one control group were randomly selected to complete the CDDQ as a pretest measure. All four groups were administered the CDDQ as a posttest measure after the two career groups had their final session.

Instrument

Developed by Gati et al. (1996), the CDDQ is a 34-item questionnaire that is based on a career decision-making taxonomy comprising three broad categories: lack of readiness, lack of information, and inconsistent information. The lack of readiness category consists of three subcategories: lack of motivation, general indecisiveness, and dysfunctional beliefs regarding the career decision-making process. The lack of information category contains four subcategories that focus on a lack of knowledge or information about the career decision-making process, self, various occupations, and ways of obtaining additional information. The third category, inconsistent information, consists of three subcategories: unreliable information, internal conflicts, and external conflicts. Respondents are asked to rate their level of difficulty for each of the statements on a 9-point scale ranging from 1 (*does not describe me*) to 9 (*describes me well*).

The psychometric data for the CDDQ are encouraging. Cronbach's alphas for the total questionnaire with a variety of samples have ranged from .88 (Gati & Saka, 2001) to .96 (Mau, 2001). For the current sample, Cronbach's alphas for the total questionnaire of .95 for the

pretest and .94 for the posttest suggest evidence of high reliability. Internal consistencies with American college students have ranged from .62 to .96 for the three broad categories (Mau, 2001; Osipow & Gati, 1998). With the current sample, the mean Cronbach's alpha was .78 for the lack of readiness category, .73 for the lack of information category, and .82 for the inconsistent information category. Validity studies with U.S. students have shown that the CDDQ correlates reasonably well with other career decision-making assessments. For example, Osipow and Gati (1998) reported a correlation of .77 between the CDDQ and the Career Decision Scale (Osipow, Carney, & Barak, 1976).

Data Analysis

We followed Braver and Braver's (1988) meta-analytic approach for analyzing the data in a Solomon four-group design. The first step involves conducting a 2 × 2 between-groups analysis of variance (ANOVA) using counseling group (yes vs. no) and pretest (yes vs. no) as variables to pretest sensitization. If the interaction effect of the variables is not significant, we would conclude that the pretest did not affect the intervention and CDDQ posttest total scores. Using the same analysis, we then analyzed the main effect of the counseling groups on CDDQ posttest total scores. Next, we conducted an analysis of covariance (ANCOVA) on the posttest scores for Groups 1 and 2, covarying the pretest scores, to determine the effect of the counseling groups on CDDQ posttest total scores. The same step-by-step analysis process also was conducted on CDDQ posttest scores of the three main categories of the scale (i.e., lack of readiness, lack of information, and inconsistent information).

Results

Braver and Braver (1988) outlined a step-by-step process for examining the results of a Solomon four-group research study. Researchers look for significant results from the analysis used in each progressive step of the meta-analytic procedure. If any analysis produces a significant effect, researchers can conclude that the significant effect was caused by the intervention and no other analyses are needed. If no significant effects are found after completing all the steps in the meta-analytic approach, then researchers conclude that the intervention most likely did not have the intended impact on the participants.

In the Braver and Braver (1988) process, the initial step was to conduct an ANOVA on the four CDDQ posttest total scores with counseling group (yes vs. no) and pretest (yes vs. no) as variables. Results indicated that there was no significant interaction between the variables, $F(1, 39) = 2.38$, $p < .14$, $\eta^2 = .41$. Therefore, there was no evidence of pretest sensitization. More simply, the act of taking the pretest had no bearing on the effect of the counseling groups or the posttest results.

The next step in the analysis was to examine whether the counseling groups had a significant effect on CDDQ posttest total scores. If there was a significant main effect for counseling groups in the aforementioned ANOVA, that would provide evidence that the groups had a significant effect on the participants' career decision-making abilities. However, a significant main effect was not found, $F(1, 39) = 1.92$, $p < .22$, $\eta^2 = .22$, and, therefore, the next step of the analysis was conducted. This involved running an ANCOVA on the posttest total scores for Groups 1 and 2,

with pretest total scores as covariates. According to Braver and Braver (1988), if the test is significant, then evidence of the counseling groups' effects "unqualified by pretest sensitization is obtained, and no further testing is necessary" (p. 151). Results were statistically significant, $F(1, 18) = 9.83$, $p < .001$, $\eta^2 = .62$, suggesting a positive effect of the counseling groups on CDDQ posttest total scores. A post hoc power analysis was conducted. With the alpha level and effect size of the ANCOVA and the sample size, achieved power was computed as .88.

The same steps of analyses were conducted on the CDDQ posttest scores for the three major categories (i.e., lack of readiness, lack of information, and inconsistent information). Similar to the outcome of the ANOVA for posttest total scores, results of the ANOVA for the three category posttest scores showed no significant interaction between the variables counseling group (yes vs. no) and pretest (yes vs. no), $F(3, 36) = 2.35$, $p < .09$, $\eta^2 = .59$. Differing from the total score ANOVA, however, was a significant main effect of the counseling groups, $F(1, 39) = 6.04$, $p < .02$, $\eta^2 = .48$. According to Braver and Braver (1988), this offers evidence of a significant effect of the counseling groups on the CDDQ posttest categorical scores. A post hoc power analysis was conducted. With the alpha level and effect size of the ANOVA and the sample size, achieved power was computed as .94.

Linear regression analysis of the effects of student participant demographics (ethnicity, gender, educational status, and major chosen) on CDDQ posttest total scores revealed that the overall model significantly predicted CDDQ posttest scores, $F(4, 35) = 2.37$, $p < .05$. R^2 for the model was .14, and adjusted R^2 was .05. Taken together, the four demographic variables accounted for only 14% of shared variability with the dependent variable (CDDQ posttest total scores). In other words, CDDQ posttest total scores varied slightly depending on participant demographics. See Table 2 for results of effects of individual demographic variables on CDDQ posttest total scores.

Table 2. Summary of Linear Regression Analysis for Student Participant Demographic Variables Affecting CDDQ Posttest Scores

Variable	*B*	*SE B*	β	*p*
Ethnicity	.06	.16	.01	.97
Gender	.24	.60	.07	.69
Educational status	.33	.16	.33	.05
Major chosen	.37	.27	.23	.18

Note. $N = 40$. CDDQ = Career Decision-Making Difficulties Questionnaire.

Discussion

Our research was guided by two research questions: (a) Does the group career counseling model, proposed by Pyle (2007), increase traditional-age college students' career decision-making abilities as measured by the CDDQ (Gati et al., 1996)? and (b) Is there a significant mean difference in career decision-making abilities for traditional-age college students who participate in the group career counseling intervention versus those who do not participate in the career groups? The results of this study suggest that students who participated in the groups did experience an increase in career decision-making abilities and in a more statistically significant fashion than those in the control group. Participants' CDDQ posttest categorical scores (i.e., lack

of readiness, lack of information, and inconsistent information) were also predicted by the career counseling groups. On the other hand, ethnicity, gender, educational status, and major chosen explained a small amount in participants' CDDQ posttest total scores.

Given the anecdotal data on the effects of career counseling groups presented in the literature, these results are not surprising. Additionally, given that traditional-age college students are in such a full state of psychosocial exploration, cohesive group dynamics seem an appropriate method of allowing students the freedom and support to examine themselves and their future options. Therefore, it is vital for group facilitators to pay attention to the group climate and cohesion throughout the process.

Limitations

This study has several limitations. Because the students had a choice between being in the groups or doing another project, those who self-selected the career groups may have brought some inherent bias to the sampling procedures. Other potentially confounding variables that were not controlled include variability in group leader and instructor styles, differences in group leader culture, differing assignments in the various career planning classes, and any out-of-group or out-of-class career exploration the participants may have completed on their own.

Implications for Counseling

The significant results of our study of a group career counseling modality on undergraduate career decision making suggest the importance of integrating Pyle's (2007) group counseling modality in career counseling for college students. Incorporating the holistic and supportive nature of group counseling into the already established psychoeducational modalities found in career and life planning courses could serve to best meet the career decision-making needs of undergraduate students. To assimilate these two effective interventions, a partnership between college counseling centers and career service centers may provide the most beneficial assistance to students. By forming a collaborative relationship, counselors and career and life planning course instructors can assist undergraduate students in acquiring education related to career planning as well as personal growth and self-awareness necessary to enhance their career decision-making skills.

For example, some college career centers employ trained professional counselors. In those centers, the counselors could simply use their own in-house information resources in conjunction with Pyle's (2007) career group counseling process. In fact, Pyle offered guidelines on how to incorporate CACG. Many college career centers have a CACG program (e.g., DISCOVER, Sigi^3 [System of Interrated Guidance and Information]) and can offer a single location for students to attend the groups and complete their out-of-group homework.

Other college career centers do not employ trained professional counselors or are simply too understaffed to offer career counseling groups. Perhaps collaboration between the campus career center and the campus counseling center could provide a useful solution. The counseling center could conduct the groups, and the career center could offer the career information needed for the students to complete the homework. Furthermore, career and life planning course instructors

could coordinate this collaboration and then stipulate that their students complete the group career counseling process as part of the course requirements or for extra credit.

Implications for Research

Although there are many counseling implications that are supported by the data in this study, additional research directions also can be surmised. For example, validation data for the use of this model with noncollege, adult participants could expand understanding of its use. Likewise, this model could be tested with groups of high school or middle school students. Furthermore, other methods of analyzing a Solomon four-group design could be used to compare results. Additionally, examining differences in group facilitators might lead to effective practices. Another option would be to use only one facilitator for all the groups to minimize group leader differences. Other potential variables for future examination include group counselor behavior, group cohesion, career beliefs, and career maturity.

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